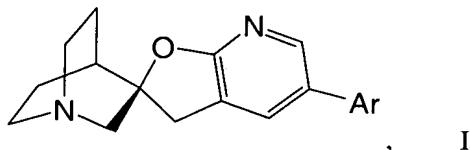


Amendments to the Claims:

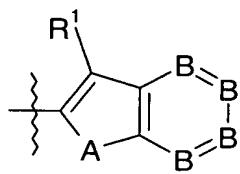
This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended) A compound of formula I:

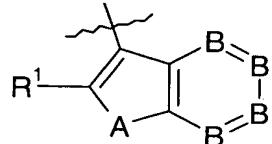


[[and]] or a pharmaceutically-acceptable salt[[s]] thereof, wherein:

Ar is a moiety of formula II or III:



II



III,

wherein,

A is O or S;

B is N at one or two occurrences and CR¹ at all other occurrences;

R¹ is independently at each occurrence hydrogen, -R², -C₂-C₆alkenyl, -C₂-C₆alkynyl, halogen, -CN, -NO₂, -NR³R⁴ or -OR⁵;

R² is an unsubstituted straight-chained, branched, or cyclic C₁-C₆alkyl group, or a straight-chained, branched, or cyclic C₁-C₆alkyl group substituted with 1, 2, 3, 4 or 5 halogen atoms, and 1 or 2 substituents selected from: C₂-C₆alkenyl, C₂-C₆alkynyl, -CN, -NR³R⁴, or -OR⁵;

R³ and R⁴ are independently at each occurrence hydrogen, R⁵, or in combination at any one occurrence of -NR³R⁴ are -(CH₂)_pJ(CH₂)_q- wherein J is O, S, NH, NR⁵ or a bond;

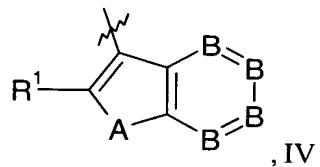
R⁵ is an unsubstituted straight-chained, branched, or cyclic C₁-C₆alkyl group, or a straight-chained, branched, or cyclic C₁-C₆alkyl group substituted with 1, 2, 3, 4 or 5 halogen atoms;

p at each occurrence is 2, 3, or 4;
q at each occurrence is 0, 1, or 2.

Claim 2 (original) A compound according to Claim 1 or a pharmaceutically-acceptable salt thereof, selected from compounds wherein B is N at one occurrence and 2 or 3 occurrences of R¹ are hydrogen, or compounds wherein B is N at two occurrences and 3 or 4 occurrences of R¹ are hydrogen.

Claim 3 (original) A compound according to Claim 1 wherein B is N at one occurrence.

Claim 4 (original) A compound according to Claim 1 or a pharmaceutically-acceptable salt thereof, wherein Ar is formula IV:



Claim 5 (original) A compound according to Claim 1 or a pharmaceutically-acceptable salt thereof, wherein A is O.

Claim 6 (original) A compound according to Claim 1, selected from the group consisting of:

(2'R)-5'-(furo[3,2-b]pyridine-3-yl)spiro{1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine};
(2'R)-5'-(furo[3,2-c]pyridine-3-yl)spiro{1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine};

(2'R)-5'-(furo[2,3-b]pyridine-3-yl)spiro{1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine}; and

(2'R)-5'-(furo[2,3-c]pyridine-3-yl)spiro{1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine}.

Claim 7 (original) A pharmaceutical composition comprising a compound according to Claim 1, and a pharmaceutically-acceptable diluent or carrier.

Claim 8 (original) The pharmaceutical composition according to Claim 7, for use in the treatment of prophylaxis of human diseases or conditions in which activation of the $\alpha 7$ nicotinic receptor is beneficial.

Claim 9 (original) The pharmaceutical composition according to Claim 7, for use in the treatment or prophylaxis of neurological disorders, psychotic disorders or intellectual impairment disorders.

Claim 10 (original) The pharmaceutical composition according to Claim 7, for use in the treatment or prophylaxis of Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, or mania or manic depression Parkinson's disease, Huntington's disease, Tourette's syndrome, neurodegenerative disorders in which there is loss of cholinergic synapse, jetlag, smoking, addiction to tobacco, nicotine addiction including that resulting from exposure to products containing nicotine, craving, pain, and for ulcerative colitis.

Claims 11 to 16 (canceled)

Claim 17 (original) A method of treatment or prophylaxis of human diseases or conditions in which activation of the $\alpha 7$ nicotinic receptor is beneficial which comprises administering a therapeutically effective amount of a compound according to Claim 1.

Claim 18 (original) A method of treatment or prophylaxis of psychotic disorders or intellectual impairment disorders, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

Claim 19 (original) The method according to Claim 18, wherein said psychotic disorder is Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder Parkinson's disease, Huntington's disease, Tourette's syndrome, a neurodegenerative disorder in which there is loss of cholinergic synapses anxiety, schizophrenia or mania or manic depression.

Claim 20 (original) A method of treatment or prophylaxis of jetlag, cessation of smoking, nicotine addiction, craving, pain, and for ulcerative colitis, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

Claim 21 (original) A compound according to Claim 1, wherein one or more of the atoms is a radioisotope of the element.

Claim 22 (original) A compound according to Claim 21, wherein the radioisotope is tritium.

Claim 23 (original) The use of a compound according to Claim 21, in a screen for the discovery of novel medicinal compounds which bind to and modulate the activity, *via* agonism, partial agonism, or antagonism, of the $\alpha 7$ nicotinic acetylcholine receptor.